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TITLE: PROCESS FOR AFFORDING HYDROPHILIC PROPERTY TO
HYDROPHOBIC POROUS FILM

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ABSTRACT:

PURPOSE: To afford hydrophilic property to hydrophobic porous film without accompanying decrease of water permeability with the lapse of time by placing hydrophobic porous film in ozone atmosphere at $\leq 80^{\circ}\text{C}$, then treating with polyol soln.

CONSTITUTION: Hydrophobic porous film which is as it is impermeable for liquid having high surface tension such as aq. soln. unless high pressure is applied, is used. The film is exposed at $\leq 80^{\circ}\text{C}$ for $1\text{sec}\sim 2\text{hr}$ in atmosphere having $0.001\sim 3\text{vol}\%$ ozone concn. Thus, hydrophilis

groups such as
OH, CO, COOH, are formed on the surface of fine pores. Within 3hr
after the
ozone treatment, the film is treated further with soln. of polyol
having
90~10,000 mol.wt. such as glycerin, polyethylene glycol, etc.
The polyol
is used as 10~80% concn. soln. by dissolving the polyol in a
solvent having
low viscosity and surface tension such as alcohol, acetone, etc.

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